Epitope sequence	IDELKECFLNQTDETLSNVE	ELLQEFIDDNATTNAIDELK	TTNAIDELKECFLNQ	ELLQEFIDDNATTNAIDELK	ELLQEFIDDNATTNAIDELK	SQHCYAGSGCPLLENVISKTI	ELLQEFIDDNATTNAIDELK		SQHCYAGSGCPLLENVISKTI			
FACS	n.d.	yes	. OL	yes	yes	yes	yes	yes	ou Ou	yes	yes	no
IHC	yes**	%es**	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Western Blot	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Epitope	Pro2	Pro3	Pro2-3	Pro3	Pro3	Pro5	Pro3	n.d.	Pro5	n.d.	n.d.	n.d.
Species	rabbit	rabbit	rabbit	rabbit	rabbit	rabbit	rabbit	monse	mouse	monse	monse	mouse
Designation	29C11	31A5	6A1	14A12	6B12	2D3	16D8	31-1H7	197-1H11	32-1611	304-1A5	98-1F4

Fig. 14

/

pc.h.mam.6a1.cell-57.579.1.t7

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pc.h.mam.16d8.cell-22.394.1.t7

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Fig. 2

Mammaglobin sequence

Peptide with Enterokinase and Thrombin cleavage sites

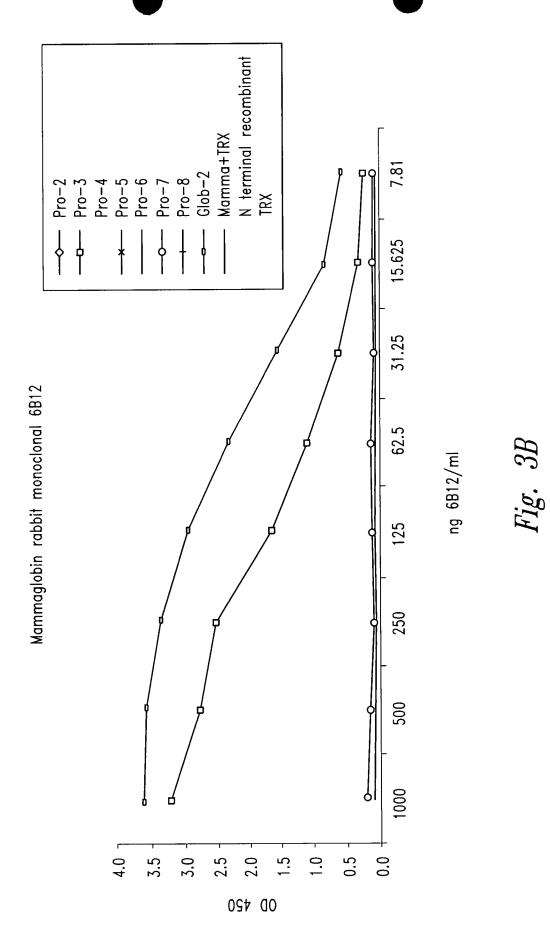
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N-terminal recombinant

HCYAGSGCPLLENVISK

	Reactivity	of Mous	e Monoclor	nal antiboc	lies to Ma	ımmaglobi	n with pe	ptides anc	Reactivity of Mouse Monoclonal antibodies to Mammaglobin with peptides and recombinants		
Antibody	Pro2	Pro-3	Pro-4	Pro-5	Pro-6	Pro-7	Pro-8	_	amma+Tlinal	recon	TRX
31–1H7	0.065	0.059	0.059	0.061	90.0	990.0	0.07	0.063	2.788	0.074	0.116
32-1611	0.056	0.055	0.054	0.054	0.022	0.057	0.055	0.055	2.75	0.057	0.07
197-1H11	0.055	0.054	0.053	1.139	0.054	0.055	0.055	0.055	2.502	2.596	0.064
304-145	0.054	0.054	0.053	0.053	0.054	0.053	0.053	0.054	2.7	0.056	0.064
98-1F4	0.068	0.055	0.053	0.055	0.059	0.064	0.11	0.112	2.819	0.118	0.121
967	0.055	0.057	0.056	0.056	0.055	0.62	0.056	0.637	1.566	0.069	0.159
Blank	0.056	0.055	0.053	0.055	0.052	0.053	0.053	0.053	0.056	0.052	90.0

Fig. 3A



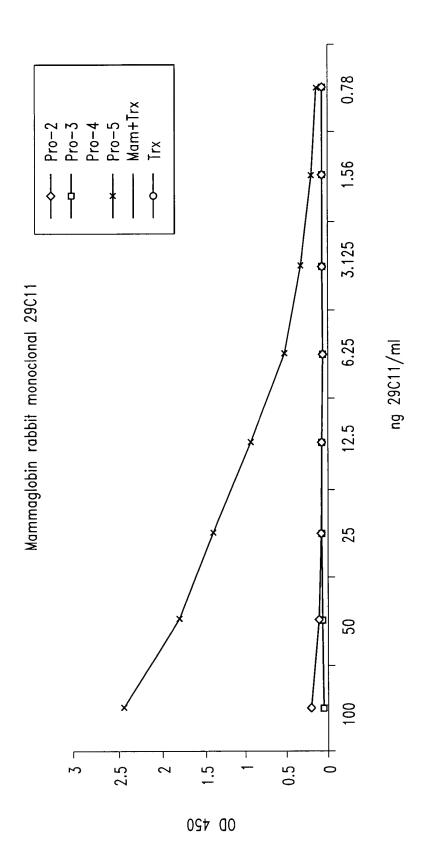


Fig. 3C

Mammaglobin rabbit monoclonal 2D3

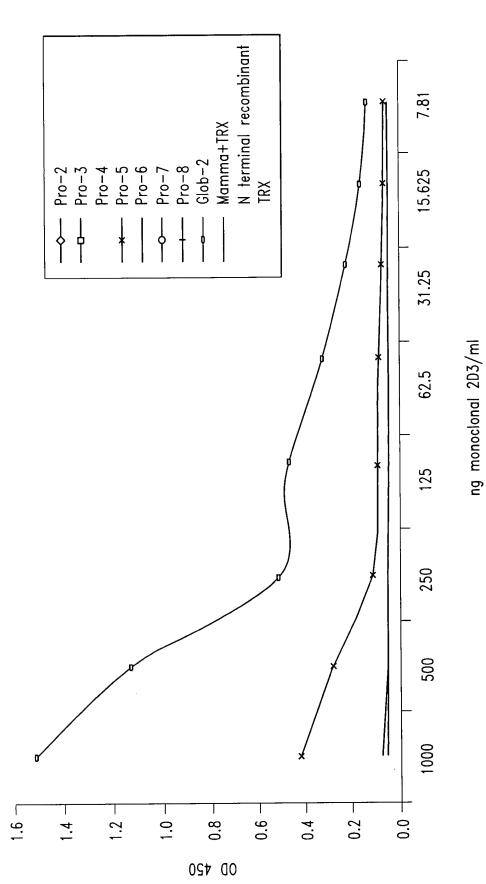
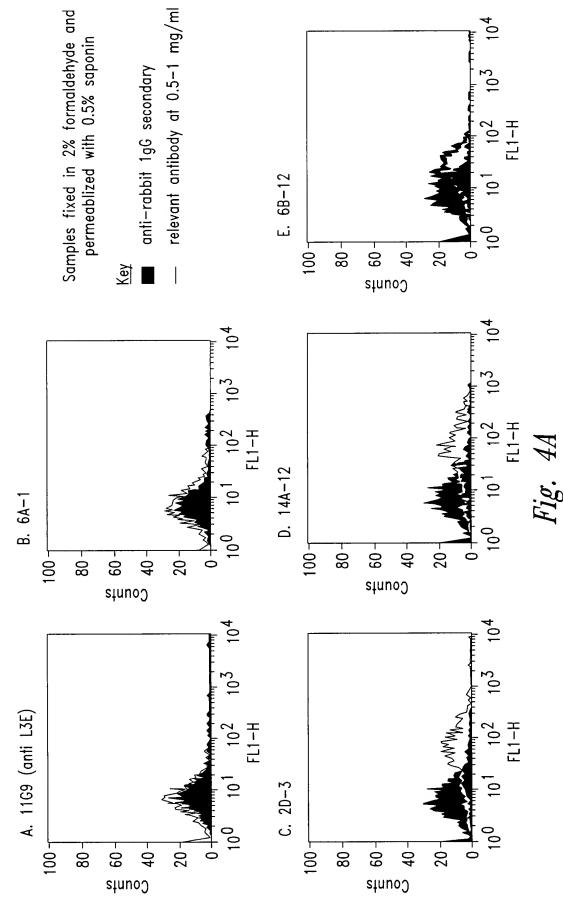
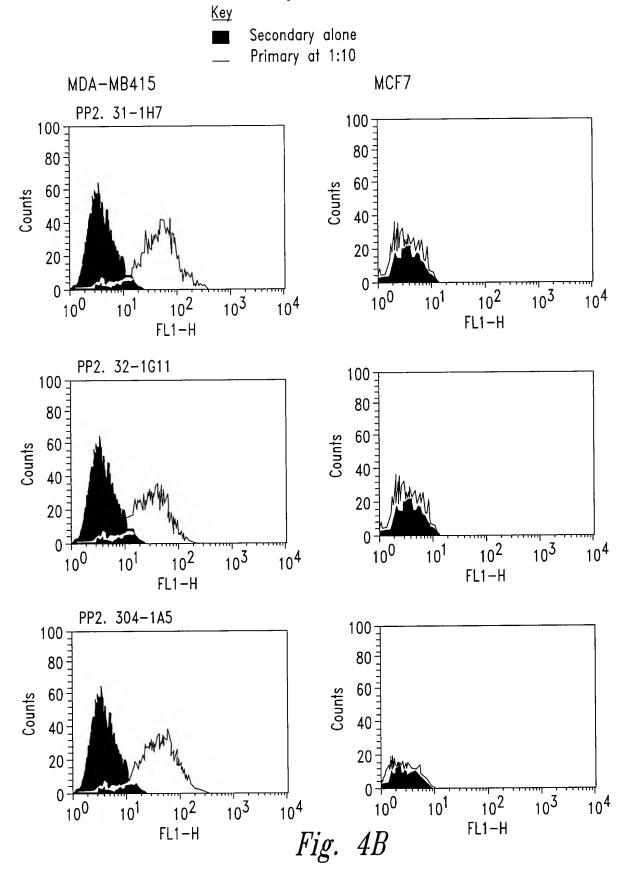


Fig. 3D

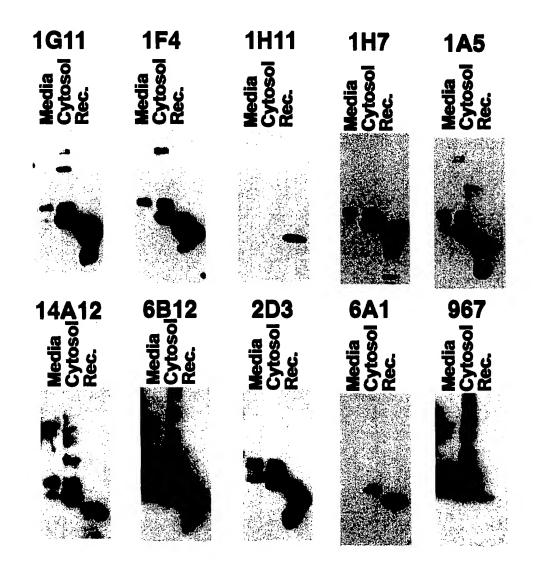
Staining of permeabilized human breast tumor cell line MDA-MB415 with rabbit anti-mammaglobin monoclonal antibodies



Staining of permeabilized human breast tumor cell lines with murine anti-mammaglobin monoclonal antibodies



Western blot analysis of Mammaglobin from MB415 cells



Mouse monoclonal: 1G11, 1F4, 1H11,1H7, 1A5 Rabbit monoclonal: 14A12, 6B12, 2D3, 6A1

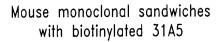
Rabbit polyclonal: 967

Rec.: bacterially expressed recombinant mammaglobin

IHC analysis of mammaglobin expression in normal tissue.

Normal Tissue	Mam-29C11/31A5
Breast	3-
Adrenal	0
Cervix	0
Colon	0
Duodenum	0
Gall bladder	0
lleum	0
Kidney	0
Ovary	0
Pancreas	0
Paroud gland	0
Prostate	0
Skeletal muscle	0
Spleen	0
Testis	0

Fig. 6



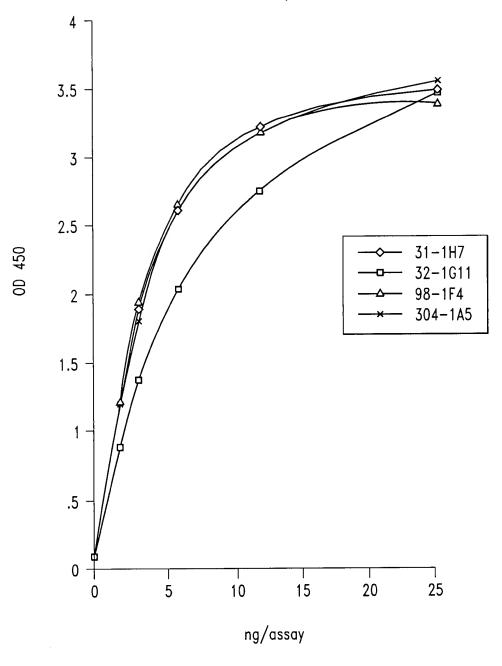


Fig. 7A

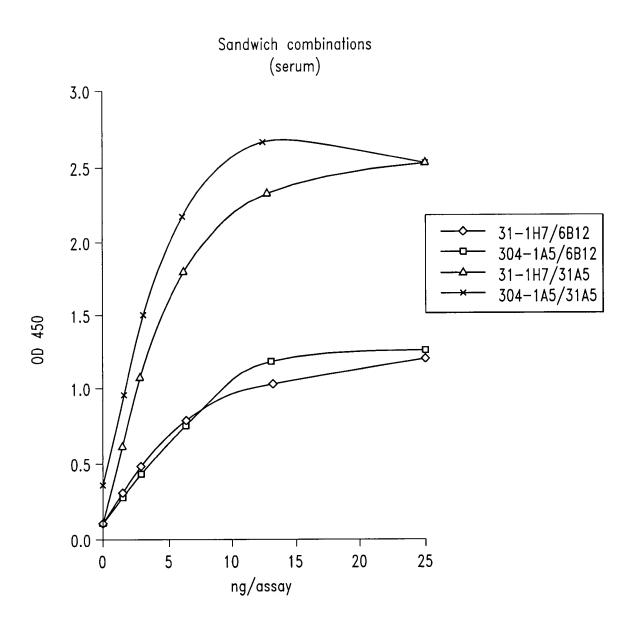
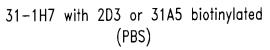


Fig. 7B



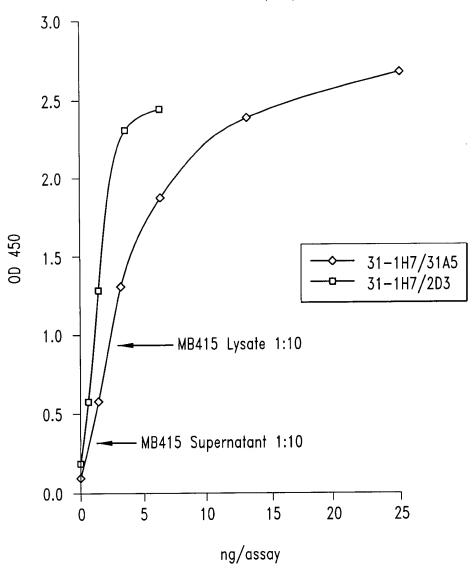


Fig. 7C

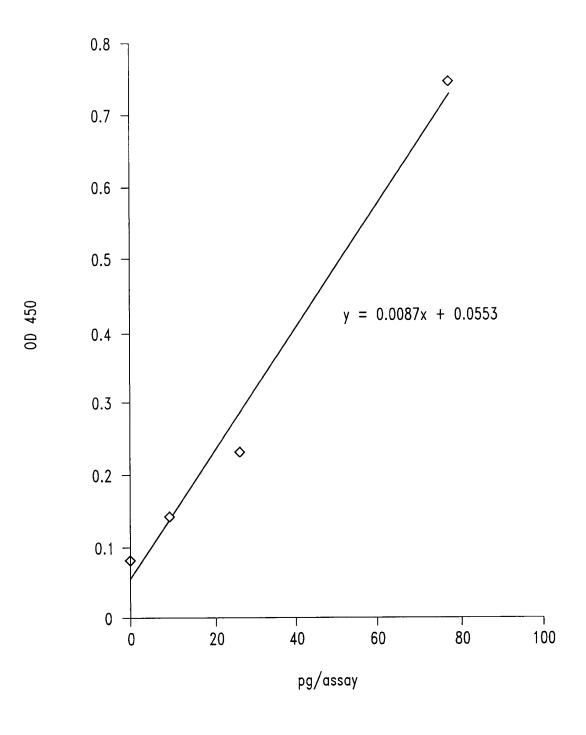


Fig. 8

Detection of mmamglobin in sera

	MRNA in blood*	not tested	+	+	weakly +	+	+	pu	not tested	not tested	pu	not tested							
Sandwich ELISA 967 Ab capture, 2D3 mAb secondary	Mammaglobin [pg/ml]**	8732	2392	1443	2298	1498	847	356	2333	636	284	188	43	149	96	18	363	443	10.8
, e >	00	3.8	5.6	1.7	1.5	9.0	9.0	0.38	0.21	0.2	0.19	0.18	0.16	0.14	0.13	0.05	0.01	0.01	XXX
Sandwich ELISA 2D3 mAb capture, 29C11 secondary	Mammaglobin [pg/ml]	4980-9600	560-1245	311-622	311-622	149-311	149-311	74-149	38-74	38-74	38-74	38-74	<33	<33	<33	<17	<17	<17	XXX
	Western	+	pu	pu	pu	pu	pu	pu	pu	pu	pu	pu	pu	pu	pu	h	pu	'n	pu
	Status	İ							Normal F	Normal M	BrCA	Normal F							
	Serum #	6 (aka 3534)	8	4	12	17		$\overline{10}$	}	18	· 00	6	, LC	5	7	14	16	13	15

Fig. 9

1a MKLLMVLMLAALSQHCYAGSGCPLLENVISKTINPQVSKTEYKELLQEFIDDNATTNAIDELKECFLNQTDETLSNVEVFMQLIYDSSLCDLF
2a MKLLMVLMLAALSQHCYAGSGCPLLENVISKTINPQVSKTEYKELLQEFIDDNATTNAIDELKECFLNQTDETLSNVEVFMQLIYDSSLCDLF
3a MKLLMVLMLAALSQHCYAGSGCPLLENVISKTINPQVSKTEYKELLQEFIDDNATTNAIDELKECFLNQTDETLSNVEVFMQLIYDSSLCDLF
4a MKLLMVLMLAALSQHCYAGSGCPLLENVISKTINPQVSKTEYKELLQEFIDDNATTNAIDELKECFLNQTDETLSNVEVFMQLIYDSSLCDLF
5a MKLLMVLMLAALSQHCYAGSGCPLLENVISKTINPQVSKTEYKELLQEFIDDNATTNAIDELKECFLNQTDETLSNVEVFMQLIYDSSLCDLF
6a MKLLMVLMLAALSQHCYAGSGCPLLENVISKTINPQVSKTEYKELLQEFIDDNATTNAIDELKECFLNQTDETLSNVEVFMQLIYDSSLCDLF
7a MKLLMVLMLAALSQHCYAGSGCPLLENVISKTINPQVSKTEYKELLQEFIDDNATTNAIDELKECFLNQTDETLSNVEVFMQLIYDSSLCDLF
8a MKLLMVLMLAALSQHCYAGSGCPLLENVISKTINPQVSKTEYKELLQEFIDDNATTNAIDELKECFLNQTDETLSNVEVFMQLIYDSSLCDLF

peptide #	AA sequence	AA location within mmgb
la	MKLLMVLMLAALSQHCYAGS	1-20
2a	ALSQHCYAGSGCPLLENVIS	11-30
3a	GCPLLENVISKTINPQVSKT	21-40
4a	KTINPQVSKTEYKELLQEFI	31-50
5a	EYKELLQEFIDDNATTNAID	41-60
6a	DDNATTNAIDELKECFLNQT	51-70
7a	ELKECFLNQTDETLSNVEVF	61-80
8a	DETLSNVEVFMQLIYDSSLCDLF	71-93

Fig. 10

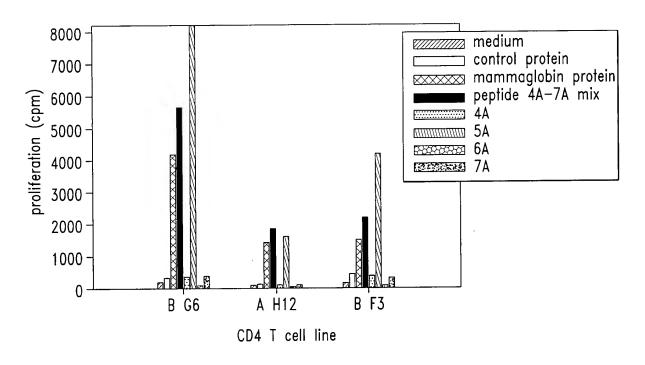


Fig. 11A

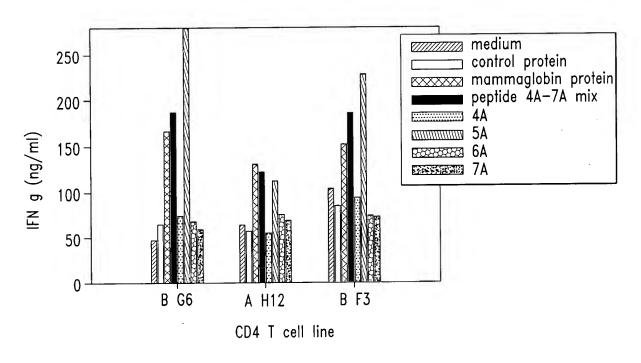
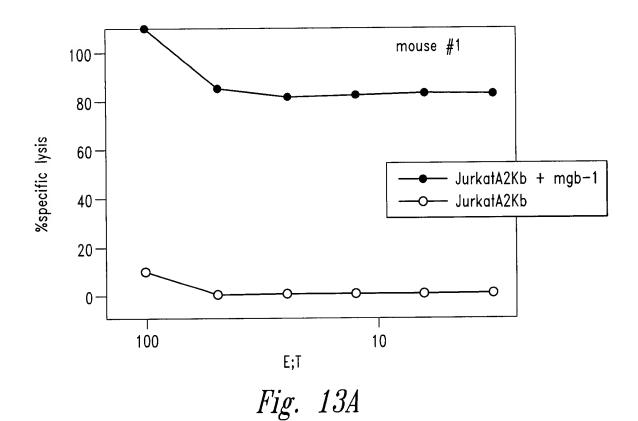


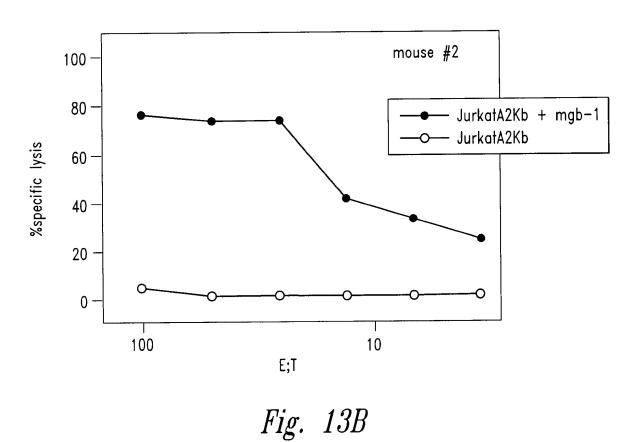
Fig. 11B

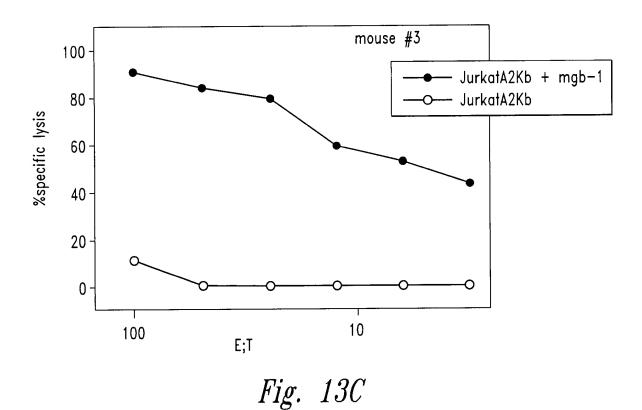
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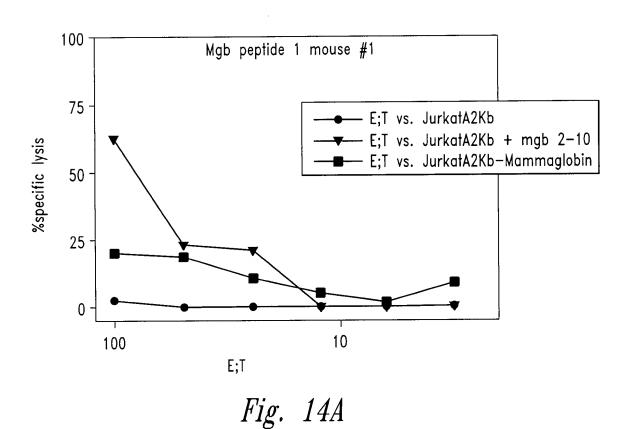
#	Start positon	sequence (length)	score
1	2	KLLMVLMLA (9)	148
2	3	LLMVLMLAA (9)	72
3	4	LMVLMLAAL (9)	60
4	66	FLNQTDETL (9)	48
6	83	LIYDsSLCDL (10)	151
7	2	KLLMVLMLAA (10)	148
8	80	FMQLiYDSSL (10)	71
9	58	AIDE1KECFL (10)	26
10	45	LLQEfIDDNA (10)	17

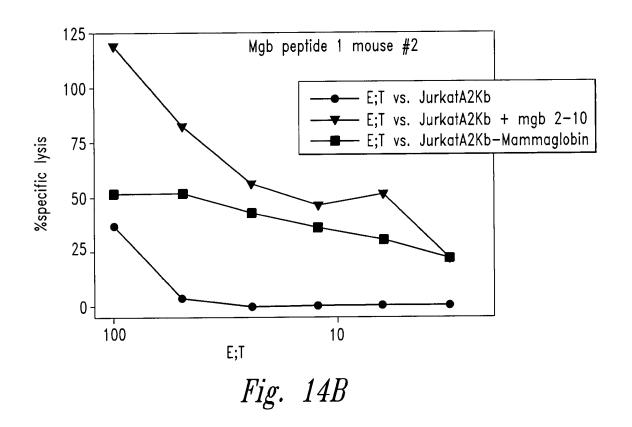
Fig. 12

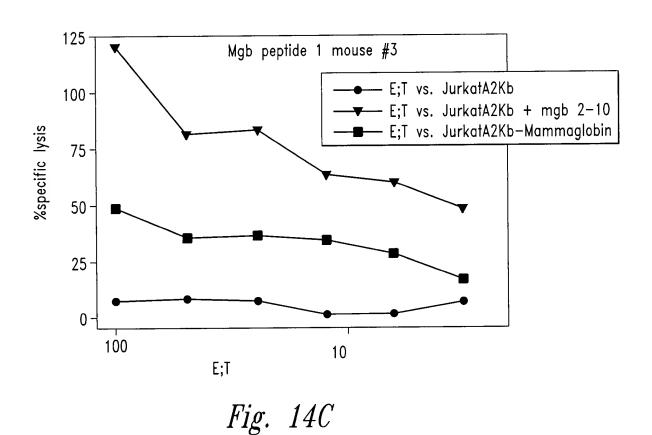


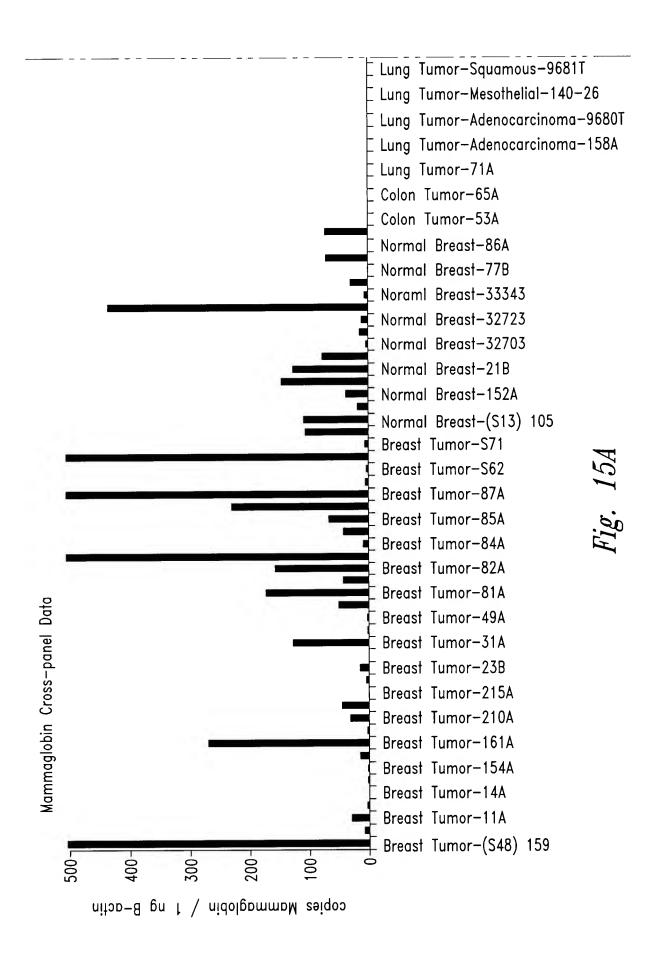












Normal Testes-4C Normal Stomach-73A Normal Stomach-137A Normal Stomach-137A Normal Small Intestine-66B Normal Skin-138A Normal Skin-60A Normal Skeletal Muscel-128A Normal Retina-32263 □ Normal Ovary-93B Normal Lung-Clontech Normal Lung-58A Normal Lung-51C Normal Liver-56A Normal Liver-136A Nomal Kidney-69A Normal Kidney-119A Normal Esophagus-1375 Normal Colon-50B Normal Brain-Clontech Normal Brain-75A Normal Bone Marrow-74A Normal Bladder-S9-1 Normal Aorta-1375 Normal Prostate-131A Normal Prostate-48B Normal Prostate-45A Normal Prostate-34C Normal Prostate-117A Prostate Tumor-40A Prostate Tumor-35A Prostate Tumor-135A Prostate Tumor-115A Ovary Tumor-120A Lung Tumor-Squamous-96A

MB415 cells versus copy number for Mammaglobin

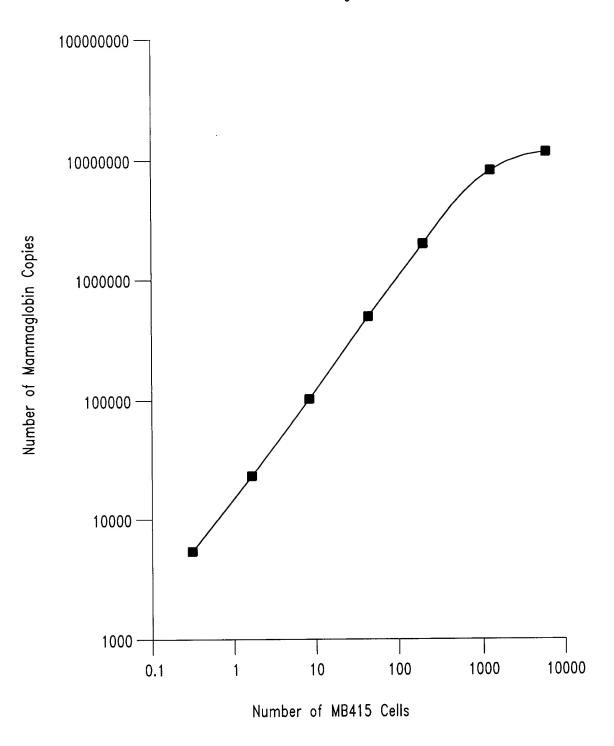
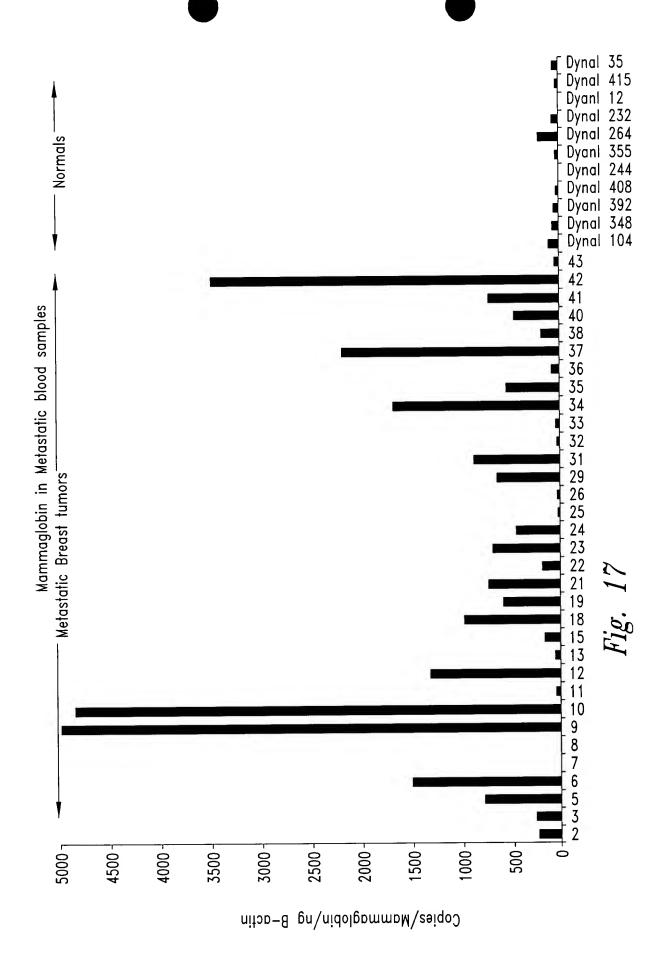


Fig. 16



4090 1222	14327		4232	1822	282	EBB.		2000	3744	5566	5983	1157 1169 667	4098	883	.	5.63		35	9 1	נפיוא	2548	518	/LSA	1171	589	12078	696	1118	3124	4834	SORO		13983	13983 2532	13983 2532 3583	13983 2532 3583 2217	13963 2532 3583 2217 761	13883 2552 3583 2217 761 13873	13883 2532 3583 3583 761 761 13873 9892	13883 2532 3583 3583 761 761 13873 9892 15168	13883 2532 2532 2217 761 13873 18873 16188	13983 2592 3583 3583 2217 761 13873 9892 15188 3365	13983 2532 2532 2532 761 761 8992 8992 3365 2296	13983 2592 3583 3583 761 13873 9892 15168 3365 2296
angb B 5A Hmsmm 10		1264	_					2954	492	689	2953	478	487	563	3	7	700	380	3 000	222	1217	2	220	25	55	465	10	946	430	1587	230		6354	6354 896	635 4 996 624	6354 996 624 76	6354 996 824 76	624 624 76 76 897	6254 896 624 76 897 54	6354 896 624 76 897 103	6354 896 624 76 76 897 103	6354 996 624 76 76 997 96 98	6354 996 624 624 76 997 103 96 . 80 2610	6354 996 624 76 76 103 103 80 2610 424
5A 7A	12589 329	17250	14070 1254			4080						2254 0015										2662 83																						2462 329 2462 329 3753 2941 10183 628 1681 1314 24892 103 6487 45 2504 90 2504 3247 2634 3247
S.	454	B (20 to 00	CDS								24010			C.A															•								7694 7694 1018 3481 4280						
¥.	49 5478	_						2258 16814			1577 (563	_	891 15789	_	326 1264%		_	_		184 2272B										1619 PERS														
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orliming per n	5A	5A	5A	5 A	1A-7A	1A-7A	44.74	(4	1A.7A	1A-7A	1A-7A	1A-7A	1A-7A	1A-7A	1A-7A	4	(<	5 1	5 1	đ :	ේ ද විසි	.	ž ī	ď,	₹ .	1A-7A	1A-7A	1A-7A	14.74	1A-7A	1A-7A	14-74		1A-7A	1A-7A 1A-7A	1A-7A 1A-7A 1A-7A	14-74 14-74 14-74 14-74	14-74 14-74 14-74 14-74	14.74 14.74 14.74 14.74 14.74	47.47 47.47 47.47 47.47 47.47 47.47	14.74 14.74 14.74 14.74 14.74 14.74	14.74 14.74 14.74 14.74 14.74 14.74 14.74	14.74 14.74 14.74 14.74 14.74 14.74 14.74
mana want		ABICII	AB:E7	AB:H12	AB:A7	A 19.40		AUG	AB:C9	AB:G7	AB:G9	AB:H12	AB:H4	CD:A4	CO.A5	2000		20.00	Aprile	ABICIO	SEC.	AB:08	AB:G/	AB:H2	AB:01	AB:E9	AB:G6	AB:H4	AB:D12	AB:D1	AB:H1	AB:A7	AB:B12		AB:F7	AB:F7 AB:G7	AB:F7 AB:G7 CD:C7	AB:F7 AB:G7 CD:C7 CD:D8	AB:F7 AB:G7 C0:C7 C0:D8 C0:G4	AB:F7 CD:C7 CD:C7 CD:D8 CD:G4 CD:G5	AB:67 CD:C7 CD:C7 CD:D8 CD:064 CD:065	AB:F7 CD:C7 CD:D8 CD:D8 CD:G5 CD:G5	AB:F7 AB:G1 CD:C7 CD:C6 CD:G6 CD:G6 CD:G6	AB:F7 AB:G1 CD:C7 CD:C7 CD:G6 CD:G8 CD:G8 CD:G8 CD:G8 CD:G8 CD:G8 CD:G8 CD:G8
Ina #	9																													28														33 33 34 35 35 35 35 35 35 35 35 35 35 35 35 35

FIGURE 19

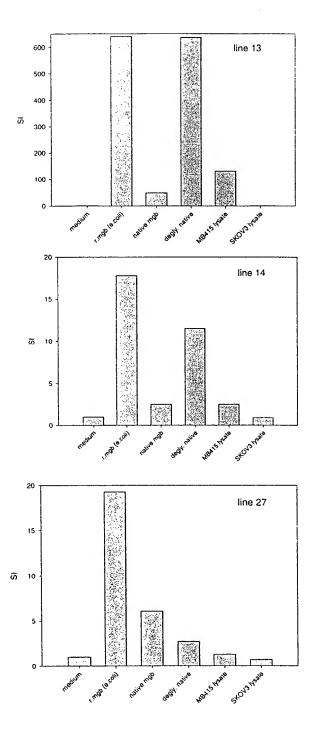


Fig. 20

H₃N- Met His tag 6aa Ra12 (short) 30aa HindIII 2aa Human mammaglobin (full length) 93aa -C00

Ra12(s)MammFL pCRX1 Expression Screen

